# A GUIDE TO U-PASS DETERMINATIONS

**Revised August 18, 2008**

## SECTION I: INTRODUCTION AND BACKGROUND

### Introduction

The Utah Office of Education (USOE) has now fully implemented its UPASS school accountability system at both the elementary and high school levels. This document is designed to provide a thorough description of Utah's U-PASS school accountability system. The intent of this document is to present this information in language that most people familiar with the system can understand yet with enough technical detail that capable individuals could replicate or at least approximate the actual results. This is not meant to replace the formal business rules used by the computer programmers, but rather this is designed to supplement those documents by making the design decisions more explicit than is possible in the highly technical documents.

First, a brief overview of the UPASS accountability system is presented, followed by more detailed definitions of the various components of the accountability system. Finally, for those technically-oriented readers, the specific business rules used to calculate school UPASS scores are presented in the last section of this document.

### U-PASS Background

The Utah Performance Assessment System for Students (U-PASS, Utah code, 53A-1-605) is a far reaching educational assessment and accountability initiative originally enacted by the Utah Legislature in 2000. Among many other things, the legislation required the design and implementation of a school accountability system designed to "identify schools not achieving state established acceptable levels of student performance in order to assist those schools in raising their student performance levels."

In September 2004, four separate groups were created to develop the accountability system. The U-PASS Task Force met twice a month to give direction to and approve the work of the three committees; high school, middle school and elementary school. The three committees met in the intermittent weeks between the Task Force meetings. Membership on these four groups included representation from teachers, school administrators, district assessment directors, district superintendents, state superintendents, state school board members, legislators, governor's office, higher education, Coalition of Minorities Advisory Council (CMAC), Parent Teachers Association (PTA), and the Utah Education Association (UEA). The Task Force and the high school, middle school and elementary school committees met on a weekly to a monthly basis during the next four months. The staff members from the National Center for the Improvement of Educational Assessment (Center for Assessment) served as expert consultants to this process.

This diverse group of designers helped ensure that as many perspectives as possible were included in the design of the accountability system while still trying to make the system as feasible as possible. To this end, all design decisions considered the potential additional burden on Utah school districts to provide data for the system in terms of the additional work required

and the potential loss of data quality as a result of either poor original data or overworked data clerks.

There are two fundamental features of the U-PASS design emerging from these deliberations that clearly distinguish U-PASS from the No Child Left Behind (NCLB) accountability system. First, U-PASS values measures of student longitudinal growth (i.e., tracking the progress of the same student across grades) as a key component of the system so that schools can meet acceptable levels of performance either because of their overall achievement in the given year (proficiency) **or** because their students' performance improved at least at the required amount (progress). Second, while NCLB has heightened the awareness of the need to ensure that all student groups are achieving at expected levels, the demographics of Utah are such that many Utah schools are not *directly* accountable for the performance of these groups because they fall below the minimum size to be considered a group. This is in spite of Utah's exceptionally low "minimum-n" of 10 students, one of the lowest thresholds in the nation. U-PASS essentially "bundles" these students into an aggregate subgroup such that essentially all Utah schools are now directly accountable for the performance of subgroups under U-PASS.

## SECTION II: GENERAL U-PASS DECISION RULES

The U-PASS accountability system classifies schools into two categories: (1) meeting state standards and (2) not meeting state standards. In order to meet state standards each school must:

- Have an average participation rate across assessments that meets the state target for both Whole School and Subgroup.
- **AND**
- Meet the achievement (proficiency) target **OR** Meet the Progress (growth) target for the Whole School
- **AND**
- Meet the achievement (proficiency) target **OR** Meet the Progress (growth) target for the Subgroup

The following table provides the required targets for each of the components listed above

## SECTION III: U-PASS CALCULATION RULES AND DEFINITIONS

The general U-PASS decision rules described above indicate that there are three basic categories of indicators for U-PASS determinations: Participation/Inclusion, Achievement/Proficiency, and Progress/Growth. The following definitions and rules are grouped according to these three categories. Additionally, there are some definitions/rules that do not fall neatly into these categories and for these items; we begin this section with these "general rules and definitions."

### General Rules and Definitions

High school/non-high school

- All schools with a $12^{th}$ grade=high school
- All schools without a $12^{th}$ grade =elementary/middle school

"Null"

- When there are no students in **BOTH** the numerator or denominator of a calculation (e.g., percent proficient) or a cell is otherwise empty for a legitimate reason, the indicator will be considered "null" in that case and that indicator will not be used in the composite calculations and the other indicators will get reweighed by distributing the weight of the missing component(s) to the other indicators.

Out of Level Tests

- Out-of-level and Modified tests are included in the U-PASS calculation as proficient (if the score is a proficiency score).

Aggregate Subgroup

- Each student identified as African American, American Indian, Asian, Hispanic, Pacific Islander, Economically Disadvantaged, Student with disability and English language learner is included in the aggregate subgroup calculation. Each student's score is included one time regardless of the number of designations.

Whole School and Subgroup

- All calculations are performed for the Whole School (all full academic year (FAY) students) and for the subgroup (all FAY students who qualify for the aggregated subgroup)

## Participation and Inclusion

The following section presents information on how various definitions contribute to the calculation of a school's participation rate and determine how various students are included in the accountability system. Basic participation rules are presented first, followed by the specific inclusion/participation rules for students with disabilities and English language learners.

### General Participation and Inclusion Rules

Attempted

Tests with a participation code of "Attempted" will be counted even if the student did not answer any questions (i.e., response code=0). Otherwise, 0 response counts will be dropped (with the exception of UAA tests which also have a response count of 0).

Blank Answer Document

Blank answer documents are always given a score of zero. Any special codes are maintained as reported by the LEA.

Full Academic Year (FAY)

160 days or more of membership in the school or LEA (if district accountability)

Late answer documents

- Prior to June 25th for traditional schools – the test is scanned, scored and included in Accountability

- Prior to July 6th for year round schools – the test is scanned, scored and included in Accountability
- After June 25th for traditional schools – the test is NOT scanned or scored; defaults to absent
- After July 6th for year round schools – the test is NOT scanned or scored; defaults to Absent

Minimum subgroup (n) rule:

- **Participation**—must have at least 40 students in either ELA, Math, or Science
- **Performance**—For a school to get a valid performance score the school must have at least 10 test scores in ELA and Math, and Science [note: if any single test is below n=10, the reports for all 3 are suppressed]

Mobile Student

A student who spends less than a full 180 days, or its equivalent in one school.

Participation

Tests marked with a non-participation code of 1 or 2 (absent & excused) AND a response count greater than zero (i.e., they attempted at least one question) will have the non-participation code deleted. In other words, responses on the test form override the non-participation codes. Non-Participation (Absent/Excused) will not count against the school for Academic Achievement, but will count for the participation rate.

Participation Rate

- The number of students attempting a CRT (or UAA) divided by the total number of validated warehouse students with CRT and UAA tests.
- The number of 6th and/or 9th graders completing the DWA divided by ALL enrolled validated warehouse 6th and/or 9th graders with DWA tests
- Out-of-level (participation code 3) and Modified tests are used in the U-PASS report as they are.

Student Groups

All assessment and accountability reports are disaggregated by: Whole School, Ethnicity, Gender, Migrant status, English Language Learner, Students with Disabilities, Students without Disabilities, Economically disadvantaged, and Non Economically disadvantaged. However, for accountability purposes, an aggregate student group is used such that all students with ethnicities other than white, students with disabilities, ELL students, and students receiving free or reduced lunch are aggregated into a single student group. This was done to maximize the number of schools responsible for the direct accountability of traditionally underrepresented students.

Student refused to test (RT)

- For tests marked with a participation code of RT AND a response count greater than zero, the RT code is removed and the test is scored for both participation (add to numerator and denominator) and academic achievement (i.e., the response count overrides the RT code)

- If the response count is zero then the RT code is retained and the test is included in participation (add to numerator and denominator) calculations and as non proficient in academic achievement.

Student takes test in a different school than resident school
Student participation and academic achievement is attributed to the school of residence

Unknown & Withdrawn answer documents
Student is removed from all calculations

Unreturned answer documents
A test record with a score of zero and a non-participation code of 'Absent' will cause an error report to be generated

## Students with Disabilities

Accommodations
Students are eligible to receive any accommodation as specified by USOE accommodation guidance. Accommodations must be indicated on student's answer document.

Modifications
If modified and accommodation is bubbled, the test score is invalidated and the student is counted as non-proficient for achievement and progress calculations and as a non-participant for participation rate calculations.

Retain in Subgroup for Two Years
SWD students will count in the SWD subgroup for two school years after the school year in which they exit the SWD program. This will be determined by the SWD exit date in the warehouse and for only those students who the district provides an exit date. This can also include "former SWD students if a student who was identified as SWD at some time in the prior two years but who no longer meets the State's definition of SWD"

UAA
The Utah Alternate Assessment (UAA) is designed to assess the knowledge and skills of the most significantly cognitively disabled students. UAA scores count in all achievement calculations and a student participating on UAA counts as a participant in the same way and for the same grades that grade level tests count for non-disabled students. However, if any CRT score is present for a student, then all UAA scores (math, language arts, science) are set to non-proficient. Proficiency on the Utah Alternate Assessment will be limited to 1% of the total state enrollment. UAA Tests can include the same test taken in multiple years.

## Inclusion/Participation Definitions for English Language Learners (ELL)

ELL Students
- Students in U.S. schools for one year or less (using the April 15th rule) are excluded from all proficiency and progress calculations.

    - In the following year, their first school year is US, these students are required to participate in the math and science CRTs, but exempt from the ELA CRT and the DWA. None of their CRT scores will count for academic performance calculations or participation rate calculations.
- First year in U.S. schools, entering prior to April 15th, student is required to participate in math and science CRTs, but not ELA CRTs. None of their CRT scores will count for performance calculations, but math and science will count in the participation rate calculations. These students, however, are required to participate in UBSCT and UBSCT scores will count
- If an answer document is received from any of the students referenced above, the test is scored and reported to the schools, but not counted in academic performance calculations.
- In the student's second school year in U.S., all test scores will count for academic performance and participation. If a CRT score can be located from the prior year, progress will be calculated for math, science, and ELA.

ELL Students Retained in Subgroup for Two Years

ELL students will count in the LEP subgroup for two school years after the school year in which they exit the ELL program. This is determined by the lep_exit_date in the student_lep table of the warehouse. This is applied *only to those students who the district provides an exit date for.* This can also include "former LEP student is a student who was identified as LEP at some time in the prior two years but who no longer meets the State's definition of LEP"

ELL Testing Rules

Students in U.S. schools for one year or less (using the April 15th rule) are excluded from all proficiency and progress calculations. The April 15th rule is as follows:

*If the student's "first year in U.S." date is April 15, or later, (this school year is not their first year in the U.S.) the student is exempt from participating in all CRTs. That student will participate in the math and science CRTs the following year (this following school year is their first year in the U.S.), but is exempt from participating in the language arts CRT the following year (this following school year is their first year in the U.S.). The math, science, and language arts CRT and DWA scores are not included in the academic calculations during that first year in the U.S. UBSCT scores are included in the academic calculations. If an answer document is received, it is scored but not included in accountability.*

*If a student's "first year in U.S." date is prior to April 15 (this school year is their first year in the U.S.), that student will participate in the math and science CRT but is exempt from participating in the language arts CRT and DWA. The math and science CRT will be included in the participation calculation. The math, science, and language arts CRT and DWA scores are not included in the academic calculations. UBSCT scores are included in the academic calculations. If an answer document is received, it is scored but not included in accountability.*

*In the student's second year in the U.S, all tests are included in participation and academic calculations. If a CRT score can be located from the prior year, progress will be calculated for math, science and ELA.*

Language Proficiency Categories

- P Pre-emergent: The student has limited or no understanding of oral or written English
- E Emergent: The student speaks, reads, and writes using single phrases or sentences with support.
- I Intermediate: The student's English literacy skills allow for demonstration of academic knowledge.
- A Advanced: The student understands and speaks conversational and academic English Language, but is not proficient on the Language Arts CRT.
- F Fluent: The student is identified at the A level on the UALPA and proficient on the grade level Language Arts CRT (district literacy assessment K-1). The student is exited from the ELL program, having achieved fluency, and is monitored for up to two years after exit.
- O Identified as ELL but opted out of services by parent
- U ELL & UAA
- Y Non-tested ELL student
- Blank Not ELL

- Students who are Fluent (F) need to have that designation continued on his/her S1 record for 2 years beyond the school year in which he/she was initially submitted as a former ELL student.
- If there is not a language proficiency code for the current year, previous year code/score used. If previous year score is used, the file will so indicate.
- If student has a clearinghouse data element that identifies him/her as LEP, but no UALPA scaled scored, then the UALPA proficiency score will be left blank.
- If student has a UALPA scaled score, but no LEP information then parent or primary language or instructional type is marked as unknown. LEP will be marked as Y.
- If a student has a UALPA code or an ELL code from the clearinghouse, they are counted as ELL in U-PASS, AYP and AMAO.
- Y and U codes for ELL students are not included in accountability calculations
- If student has a clearinghouse data element that identifies him/her as LEP, but no UALPA scaled scored, then the UALPA proficiency score will be left blank.
- If student has a UALPA scaled score, but no LEP information then parent or primary language or instructional type is marked as unknown. LEP will be marked as Y.
- If a student has a UALPA code or an ELL code from the clearinghouse, they are counted as ELL in AYP and UPASS.

## Achievement/Status

The achievement or status component of the U-PASS accountability system is basically determined by evaluating Criterion Referenced Test (CRT), Direct Writing Assessment (DWA), and Utah Basic Skills Competency Test (UBSCT) scores for both the whole school and subgroup in a given year. The achievement component of U-PASS is reported on a percent proficient scale (described below) and reflects the achievement level of a school or district at a single point in time (the U-PASS reporting year). This section presents the definition for the achievement/proficiency components as well as the definitions for the additional indicators, which are also included in the larger proficiency calculations.

Achievement (proficiency) level

Achievement is calculated by dividing the number of students scoring proficient or above (levels 3 or 4) on the appropriate CRT divided by the number of students who met the attendance criteria for the year and took that particular CRT test.

Attendance

Attendance in the U-PASS accountability system uses a research-based truancy indicator by dividing the number of FAY students in all grades for that school with fewer than 15 absences for the full school year by the total number of students in all grades for that school enrolled for a full academic year. The attendance indicator counts 10% in the proficiency score for both the elementary and high school U-PASS systems.

Criterion Referenced Tests (CRT)

Students are required to participate in the CRTs appropriate for their particular grade level and course. Specific requirements follow:

- **Elementary CRTs**:
  - *Students in grade 3* are required to complete CRTs in English language arts (ELA) and mathematics.
  - *Students in grades 4-7* are required to complete grade level CRTs in ELA, science, and mathematics. Students participating in the pre-algebra, algebra, or geometry CRT in seventh grade are not required to participate in the grade 7 math CRT.
  - *Students in grade 8* are required to complete grade level CRTs in ELA and science, but an end-of-course science CRT (Earth Science, Life Science, Chemistry, or Physics) may replace the grade 8 science CRT. Students in grade 8 are required to complete the pre- algebra, algebra, or geometry CRT.
- **Secondary CRTs**:
  - *Students in grades 9-11* are required to complete the appropriate grade level ELA CRT.
  - *Students in grades 9-12* are required to complete at least two end-of-course science CRTs (Earth Science, Life Science, Chemistry, or Physics) and the algebra and geometry CRTs if these had not been completed prior to ninth grade. Any student completing the pre-algebra CRT will be counted as a participant but will be considered not proficient. The student's score will be reported on all CRT documents and files as the actual score the student receives.

Graduation Rate

Ensuring that students graduate from high school is an indicator of a successful high school. Therefore, graduation rate is an important indicator—calculated the same way as it is for AYP. For the high school U-PASS system, graduation rate is worth 15% of the high school proficiency score.

Mathematics Indicator (high school only)

Mathematics CRTs are only available for algebra and geometry courses in high school and students taking the algebra and geometry CRTs in $9^{th}$ or $10^{th}$ grades, respectively, or later tend to be lower performing students. Therefore, the U-PASS design team decided to include an additional mathematics indicator to provide an incentive for high schools to continue to enroll

students in rigorous mathematics course once they complete the geometry CRT. This indicator is computed by dividing the number of 10th and 11th grade FAY students earning one or more credits in an approved math course beyond Geometry by all 10th and 11th grade students enrolled for a full academic year (160 days), but not enrolled in a CRT math course, as defined by July 15th enrollment data. The mathematics indicator counts 30% of the mathematics achievement composite.

Modified Assessment
If CRT, DWA, or UBSCT is modified (i.e., invalidly accommodated), the score is set to non-proficient and non participation.

Multi-grade classrooms
If approved by Assessment Director, student receives achievement and participation for the CRT that they take.

Multiple Assessments
A CRT score for a specific test may ONLY count the first time the student participates in that specific assessment EXCEPT for students participating in UAA. A student participating in more than one CRT in a given content area may have multiple scores counted as long as the CRTs are not the same assessment.

Out of level CRT
If any CRT is out-of-level, then the scores are set to non-proficient and non-participation.

Retakes
If the student takes the same test more than once, over a two year period, the 2nd test will not be used in accountability

Rounding of Results
For the purposes of calculating results, scores are aggregated and then the sum is rounded according to common practice, i.e. .5 and above is raised to the next whole number.

Utah Basic Skills Competency Test (UBSCT, high school only)
UBSCT is a component of the achievement/proficiency score for the high school U-PASS. The UBSCT component of the achievement/proficiency score is derived from the first (10th grade) administration of the test. All three tests—math, reading, and writing—count in the respective composite scores. For each of the three UBSCT tests, the percent proficient is calculated by dividing the number of FAY students passing the 10th grade administration of the respective UBSCT test by the number of non-UAA 10th grade students enrolled for a full academic year (160 days). The UBSCT math test counts 20% of the math composite and the reading and writing tests each count 10% (for a total of 20%) in the ELA composite for the high school U-PASS achievement score.

## Progress/Growth

Introduction to Value Tables

Utah has employed a "value table" approach for holding schools accountable for student longitudinal growth. The table provides incentives to schools to increase the performance of matched students, especially those scoring below proficient as they move through the school. Due to the large amount of progress that can occur within levels one and two, those levels were divided to award students points for moving from the lower portion of that proficiency level to the higher portion of the proficiency level. These levels were dividing by finding the mid-point on the score scale for the base year and then using that equated scale score in subsequent years to divide the performance levels.

| Year 1 Level | Year 2 Level | | | | | |
|---|---|---|---|---|---|---|
| | 1a | 1b | 2a | 2b | 3 | 4 |
| 1a | 0 | 200 | 350 | 350 | 400 | 400 |
| 1b | 0 | 125 | 225 | 350 | 375 | 400 |
| 2a | 0 | 50 | 150 | 225 | 350 | 350 |
| 2b | 0 | 0 | 75 | 175 | 275 | 325 |
| 3 | 0 | 0 | 0 | 100 | 200 | 275 |
| 4 | 0 | 0 | 0 | 0 | 125 | 225 |

Figure 1. Elementary/middle value table.

The value table approach for capturing student progress is based on the theory that accountability can best motivate behavior on the part of school personnel if the expectations are very transparent to the educators. Importantly, the value table approach is one of the few standards-based methods for calculating student growth. Unlike many complex models, educational leaders can calculate their progress scores—as well as what they need to do to meet the state goals—with a hand calculator. Schools are awarded points based on students' scores in year-one compared to their scores in the next grade in year-two. For example, the table above indicates that a student starting in Level 1b in year-one who reaches Level 2a in the next year will generate 225 points for that school. The total number of points for each school is then divided by the number of students for which there is matched data to arrive at the school's value table score.

Attendance Progress

A simple 2 x 2 value table was created to reward progress in attendance (non-truancy) rates and place the attendance score on the same scale as the CRT value table scale.

CRT Progress Scores

Progress scores are calculated for all students for whom a prior score in the same content area can be found in the previous year. For mathematics and ELA, progress scores are calculated

starting in grade 3 and through 11th grade for ELA and geometry for mathematics. Progress scores for science are first calculated for grade 5 (since 4th grade is the first science test) and calculated through high school whenever a CRT is administered and a score from the prior year is available.

UBSCT Progress

This indicator is calculated by finding the difference between the 12th grade pass rate and the initial (10th grade) pass rate and then rescaling this value to put it on the same scale as the value table scale.

## SECTION IV: ELEMENTARY/MIDDLE SCHOOL UPASS CALCULATION RULES

| Indicator | Component | Calculation |
|---|---|---|
| Participation Rate | CRT/UAA | The number of valid students attempting a CRT (or UAA) DIVIDED by the total number of validated warehouse students with CRT and UAA tests (proficiency on the Utah Alternate Assessment will be limited to 1% of the total state enrollment). |
| | DWA | The number of 6th and/or 9th graders (if applicable) completing the DWA (or UAA) DIVIDED by ALL enrolled validated warehouse 6th and/or 9th graders with DWA tests |
| | **Composite** | ➢ With a 6th and/or 9th grade: (CRT*.90) (DWA*.10)<br>➢ Without a 6th and/or 9th grade: (CRT*1.0) |
| CRT Status | General CRT Status Note | 1. A CRT score for a specific test may ONLY count the first time the student participates in that specific assessment EXCEPT for students participating in UAA.<br>2. A student participating in more than one CRT in a given content area may have multiple scores counted as long as rule#1 above is not violated. |
| | Math CRT | The number of students scoring at Level 3 or 4 on any math CRT (and UAA) DIVIDED by the number of validated warehouse students enrolled for a full academic year (160 days) with math CRT scores [NOTE: in 2009 and beyond, this will include the Intermediate Algebra CRT] |
| | ELA CRT | Number of students in grades scoring at Level 3 & 4 on the ELA CRTs (and UAA) DIVIDED by the number of validated warehouse students enrolled for a full academic year (160 days) with ELA CRT scores. |
| | Science CRT | Number of students scoring at Level 3 & 4 on any science CRT (and UAA) DIVIDED by the number of validated warehouse students enrolled for a full academic year with science CRT scores. |
| Additional Indicators | Attendance | The number of FAY students in all grades for that school with fewer than 15 absences for the full school year DIVIDED by the total number of high school students in all grades for that school enrolled for a full academic year determined by the July 15th data submission. |
| **Status Composite** | | For schools with a 6th and/or a 9th grade<br>(ELA CRT * 0.30) + (DWA * 0.05) + (Math CRT * 0.35) + (Science CRT * 0.20) + (Attend * 0.10)<br><br>For schools w/out a 6th and/or a 9th grade<br>(ELA CRT * 0.35) + (Math CRT * 0.35) + (Science CRT * 0.20) + (Attend * 0.10) |
| Progress | General Value Table Rules | Apply the same value table rules as specified for the high school UPASS calculations above. |

| | | |
|---|---|---|
| | ELA | Use the general value table rules above to calculate the values associated with the change in student performance across any two years of ELA scores. |
| | Math | Use the general value table rules above to calculate the values associated with the change in student performance across any two years. The student longitudinal performance will be based on any math CRT in year one and any other math CRT administered to the same student in the next year. |
| | Science | Use the general value table rules above to calculate the values associated with the change in student performance across any two years. The student longitudinal performance will be based on any science CRT in year one and any other science CRT administered to the same student in the next year. |
| | Attendance | Use the general value table rules and the attendance progress value for calculating attendance progress. |
| **Progress Composite** | | (ELA CRT Progress *.35) + (Math CRT Progress * .35) + (Science CRT Progress * .20) + (Attendance Progress * .10) |
| **Status + CI** | | Use the Proficiency Composite calculated above and add it to the Proficiency CI (1.96 x SE) found below. |
| **Progress + CI** | | Use the Progress Composite calculated above and add it to the Progress CI (1.96 x Progress SE) found below |
| **Evaluation** | | Using the cutscores of 80 for Status and 190 for Progress, each school will be evaluated as follows:<br>➢ IF<br>• Whole School and Subgroup participation rate ≥ 95%<br>AND<br>➢ IF<br>• Whole School Proficiency Score + CI ≥ 80<br>➢ OR<br>• Whole School Progress Score + CI ≥ 190<br>➢ THEN Whole School = Yes<br>AND<br>➢ IF<br>• Subgroup Proficiency Score + CI ≥ 80<br>➢ OR<br>• Subgroup Progress Score + CI ≥ 190<br>➢ THEN Whole School = Yes<br><br>**Evaluation**<br>√ YES AND YES = School has Achieved State Required Performance<br>√ YES AND NO = School is classified as "Needs assistance"<br>√ NO AND NO = School is classified as "Needs assistance" |

Elementary/Middle School UPASS Technical Details

## Confidence Interval Calculations:

### Status (Similar to AYP)

$$StatusScore_{school} = mean_{sclscore} + CI_{school}$$

$$CI_{school} = 1.96 * SE_{school}$$

$$SE_{school} = \sqrt{.80*.20 / n_{ELAtests}}$$ **[Note: the .80 and .20 will change if new cutscores are established.]**

$mean_{sclscore}$ = weighted school status score (Math, ELA, Science & Attendance)
$n_{ELAtests}$= the number of ELA test scores for the school of interest

*This is calculated for both total school and subgroup

### Progress

$$Progress_{school} = meanvtscore_{school} + CI_{school}$$

$$CI_{school} = 1.96 * SE_{school}$$

$$SE_{school} = \sqrt{average_{var} / n_{ELAtests}}$$

$$average_{var} = \sum var_{school} / n_{schools}$$

$$var_{school} = \sum (ELAvtscore_{student} - meanELAvtscore_{school})^2 / n_{ELAtests} - 1$$

$meanvtscore_{school}$ = weighted value table score for the school (Math, ELA, Science & Attendance)
$ELAvtscore_{student}$ = ELA value table score for the student
$meanELAvtscore_{school}$ = average ELA value table score for the school to which the student belongs
$n_{ELAtests}$= the number of ELA test scores for the school of interest
$n_{schools}$ = the number of schools

*This is calculated for both total school and subgroup

**Attendance Value Table**

| **Year 1** | **Year 2**<br>**Absent 15 days or more** | **Year 2**<br>**Absent fewer than 15 days** |
|---|---|---|
| Absent 15 days or more | 0 | 300 |
| Absent fewer than 15 days | 0 | 200 |

**Elementary/Middle School Value Table**

| Year 1 Level | Year 2 | | | | | |
|---|---|---|---|---|---|---|
| | 1a | 1b | 2a | 2b | 3 | 4 |
| 1a | 0 | 200 | 350 | 350 | 400 | 400 |
| 1b | 0 | 125 | 225 | 350 | 375 | 400 |
| 2a | 0 | 50 | 150 | 225 | 350 | 350 |
| 2b | 0 | 0 | 75 | 175 | 275 | 325 |
| 3 | 0 | 0 | 0 | 100 | 200 | 275 |
| 4 | 0 | 0 | 0 | 0 | 125 | 225 |

## SECTION V: HIGH SCHOOL U-PASS CALCULATION RULES

This section on rules begins with general rules and definitions that are applicable for both high school and elementary/middle schools. The specific rules for calculating high school UPASS results follow the general definitions. Next, the elementary/middle school rules are presented.

| Indicator | Component | Calculation |
|---|---|---|
| Participation Rate | CRT/UAA | The number of valid students attempting a CRT (or UAA) DIVIDED by the total number of validated warehouse students with CRT and UAA tests (proficiency on the Utah Alternate Assessment will be limited to 1% of the total state enrollment). |
| | DWA | The number of 9th graders completing the DWA (or UAA) DIVIDED by ALL enrolled validated warehouse 9th graders with DWA tests |
| | **Composite** | ➢ With a 9th grade: (CRT*.90) (DWA*.10)<br>➢ Without a 9th grade: (CRT*1.0) |
| UBSCT Status | UBSCT Math | The number of FAY students passing the 10th grade administration of the UBSCT Math test DIVIDED by the number of non-UAA 10th grade students enrolled for a full academic year (160 days). |
| | UBSCT Reading | The number of FAY students passing the 10th grade administration of the UBSCT Reading test DIVIDED the number of non-UAA 10th grade students enrolled for a full academic year (160 days). |
| | UBSCT Writing | The number of FAY students passing the 10th grade administration of the UBSCT Writing test DIVIDED by the number of non-UAA 10th grade students enrolled for a full academic year (160 days). |
| CRT Status | General CRT Status Note | 1. A CRT score for a specific test may ONLY count the first time the student participates in that specific assessment EXCEPT for students participating in UAA.<br>2. A student participating in more than one CRT in a given content area may have multiple scores counted as long as rule#1 above is not violated. |
| | Math CRT | The number of students scoring at Level 3 or 4 on any math CRT (and UAA) DIVIDED by the number of validated warehouse students enrolled for a full academic year (160 days) with math CRT scores [NOTE: in 2009 and beyond, this will include the Intermediate Algebra CRT] |
| | ELA CRT | Number of students in grades scoring at Level 3 & 4 on the ELA CRTs (and UAA) DIVIDED by the number of validated warehouse students enrolled for a full academic year (160 days) with ELA CRT scores. |
| | Science CRT | Number of students scoring at Level 3 & 4 on any science CRT (and UAA) DIVIDED by the number of validated warehouse students enrolled for a full academic year with science CRT scores. |

| | | |
|---|---|---|
| Math Indicator | Math | The number of 10th and 11th grade FAY students earning one or more credits in an approved math course beyond Geometry DIVIDED by all 10th and 11th grade students enrolled for a full academic year (160 days), but not enrolled in a CRT math course, as defined by July 15th enrollment data. The "approved" math courses are found in the technical details below. |
| Composite Scores | Math | (Math UBSCT Status * 0.20) + (Math CRT Status * 0.50) + (Math Additional Academic Engagement Indicator * 0.30)<br>**NOTE**: If any of the three indicators are missing or N/A, the weight of that indicator gets distributed to the other two indicators. For example, if the numerator and denominator of the math course variable were 0 (of course that would mean that there are no 10th and 11th grade students), Math UBSCT Status would be weighted 0.35 and Math CRT Status would be 0.65. |
| | ELA | For schools with a 9th grade = (UBSCT reading status * 0.10) + (UBSCT writing status * 0.10) + (ELA CRT status * 0.75) + (DWA status * 0.05)<br>If DWA is missing, use the equation for schools without a 9th grade.<br>For schools w/out a 9th grade= (UBSCT reading status * 0.10) + (UBSCT writing status * 0.10) + (ELA CRT status * 0.80) |
| | Science | (Science CRT Status * 1.00) |
| Additional Indicators | Attendance | The number of FAY students in all grades for that school with fewer than 15 absences for the full school year DIVIDED by the total number of high school students in all grades for that school enrolled for a full academic year determined by the July 15th data submission. |
| | Graduation Rate | The same calculation as AYP. Note: early graduates count as graduates for the school. |
| **Status Composite** | | **(ELA Comp * 0.30) + (Math Comp * 0.25) + (Science Comp * 0.20) + (Attend * 0.10) + (Graduation Rate * 0.15)**<br>Note: If any of the components of this composite equation are missing, the weight for the missing component gets distributed to the other components. |
| Progress | UBSCT | Calculate the difference between the final (end of 12th grade) pass rate and the initial pass rate (10th grade) as follows: [Number of non-UAA FAY students in 12th grade who have passed all 3 UBSCT tests (plus early graduates) DIVIDED BY the total number of non-UAA FAY (include early graduates) 12th grade students] – [Number of FAY students in the 10th grade two year prior who passed all 3 UBSCT tests DIVIDED BY the total enrollment of 10th grade students two years prior] (UBSCT status from 2yrs prior)<br>Note: UBSCT progress scores should be truncated at 0 and 100.<br>**Use the following formula to rescale the UBSCT Progress composite:** |

| | | |
|---|---|---|
| | | Rescaled UBSCT Progress Score =<br>(UBSCT Progress Score x 1.65) + 167<br>[Note: This equation is used to place the UBSCT Progress Score on the same scale as the value table composites.] |
| | General Value Table Rules | 1. This is designed to provide school, level results. Computer services will figure out how to best structure the aggregation rules so this is most efficient.<br>2. Match students across the two years using the unique student identifier.<br>3. Document the number/percent of students that fall out of the match. We'll want to report the number of students in the Progress calculations.<br>4. Each student should have CRT scores for ELA for all grades 8-11, a math score for courses through geometry, and science CRT scores for Earth Systems, Biology, Chemistry, and Physics.<br>5. Use the attached table to create the split performance levels 1a, 1b, 2a, 2b, 3, & 4.<br>6. Produce a crosstab table that presents the number [NOTE that we are using the frequency here and NOT the percentages] of FAY students for Year 2 in the school scoring in a given achievement level in Year 1 BY the same students' scores in Year 2. See the example below in the technical details section.<br>7. Use the value table below (see technical details) to calculate the value table score for each school as follows:<br>a. COUNT the number of students scoring in Level 1a in Year 1 and in Level 1a in Year 2 and multiply this count by 0.<br>b. COUNT the number of students scoring in Level 1a in Year 1 and in Level 1b in Year 2 and multiply this count by 200.<br>c. COUNT the number of students scoring in Level 1a in Year 1 and in Level 2a in Year 2 and multiply this count by 250.<br>d. COUNT the number of students scoring in Level 1a in Year 1 and in Level 2b in Year 2 and multiply this count by 300.<br>e. COUNT the number of students scoring in Level 1a in Year 1 and in Level 3 in Year 2 and multiply this count by 350.<br>f. COUNT the number of students scoring in Level 1a in Year 1 and in Level 4 in Year 2 and multiply this count by 375.<br>g. Continue this process for each Year 1 level (1a, 1b, 2a, 2b, 3, & 4) |

| | | |
|---|---|---|
| | | h. Sum the values from steps a-g* (assuming you've carried out all the steps implied by "g") and divide by the number of students in the matched sample who meet the school FAY criteria for Year 2.<br>8. These analyses must be replicated for the aggregate subgroup, using the same subgroup rules that are used for the 3-8 system.<br>9. Note: For students completing two or more unique CRTs in a given content area in the same year, use the low score from the first year and the high score from the second year. |
| | ELA | Use the general value table rules above to calculate the values associated with the change in student performance across any two years of ELA scores. |
| | Math | Use the general value table rules above to calculate the values associated with the change in student performance across any two years. The student longitudinal performance will be based on any math CRT in year one and any other math CRT administered to the same student in the next year. |
| | Science | Use the general value table rules above to calculate the values associated with the change in student performance across any two years. The student longitudinal performance will be based on any science CRT in year one and any other science CRT administered to the same student in the next year. |
| | Attendance | Use the general value table rules and the attendance progress value for calculating attendance progress. |
| **Progress Composite** | | (**Rescaled UBSCT Progress** * .25) + (Science CRT Progress * .15) + (Math CRT Progress * .15) + (ELA CRT Progress *.35) + (Attendance Progress * .10) |
| **Status + CI** | | Use the Status Composite calculated above and add it to the Status CI (1.96 x SE) found below. |
| **Progress + CI** | | Use the Progress Composite calculated above and add it to the Progress CI (1.96 x Progress SE) found below |
| **Evaluation** | | Using the cutscores of 75 for Status and 180 for Progress, each school will be evaluated as follows:<br>➢ IF<br>• Whole School & Subgroup participation rate $\geq$ 95%<br>AND<br>➢ IF<br>• Whole School Proficiency Score + CI $\geq$ 75<br>➢ OR<br>• Whole School Progress Score + CI $\geq$ 180<br>➢ THEN Whole School = Yes<br>AND<br>➢ IF<br>• Subgroup Proficiency Score + CI $\geq$ 75<br>➢ OR |

| | | |
|---|---|---|
| | | • Subgroup Progress Score + CI $\geq$ 180<br>➢ THEN Whole School = Yes<br><br>**<u>Evaluation</u>**<br>√ YES AND YES = School has Achieved State Required Performance<br>√ YES AND NO = School is classified as "Needs assistance"<br>√ NO AND NO = School is classified as "Needs assistance" |

High School UPASS Technical Details

## Confidence Interval Calculations:

### Status (Similar to AYP)

$$StatusScore_{school} = mean_{sclscore} + CI_{school}$$

$$CI_{school} = 1.96 * SE_{school}$$

$$SE_{school} = \sqrt{.75*.25 / n_{ELAtests}}$$ **[Note: the .75 and .25 will change if new cutscores are established.]**

$mean_{sclscore}$ = weighted school status score (Math, ELA, Science & Attendance)
$n_{ELAtests}$= the number of ELA test scores for the school of interest

*This is calculated for both total school and subgroup

### Progress

$$Progress_{school} = meanvtscore_{school} + CI_{school}$$

$$CI_{school} = 1.96 * SE_{school}$$

$$SE_{school} = \sqrt{average_{var} / n_{ELAtests}}$$

$$average_{var} = \sum var_{school} / n_{schools}$$

$$var_{school} = \sum (ELAvtscore_{student} - meanELAvtscore_{school})^2 / n_{ELAtests} - 1$$

$meanvtscore_{school}$ = weighted value table score for the school (Math, ELA, Science & Attendance)
$ELAvtscore_{student}$ = ELA value table score for the student
$meanELAvtscore_{school}$ = average ELA value table score for the school to which the student belongs
$n_{ELAtests}$= the number of ELA test scores for the school of interest
$n_{schools}$ = the number of schools

*This is calculated for both total school and subgroup

**Approved Math Courses**

| core_code | core_ flag | active_ inactive | grade_ low | grade_ high | core_short_desc |
|---|---|---|---|---|---|
| 07020000020 | Y | A | 09 | 12 | Intermediate Algebra (9-12) |
| 07020000030 | Y | I | 09 | 12 | Trigonometry (9-12) |
| 07020013020 | N | A | 09 | 12 | Intermediate Algebra (9-12) Conc. Enroll |
| 07020023020 | Y | A | 09 | 12 | Intermediate Algebra (9-12) - Special Ed |
| 07030000010 | Y | A | 09 | 12 | Applied Mathematics II (9-12) |
| 07030023010 | Y | A | 09 | 12 | Applied Mathematics II (9-12)-Special Ed |
| 07040000000 | Y | A | | | Calculus |
| 07040000001 | Y | A | 10 | 12 | A.P. Calculus (AB) (10-12) |
| 07040000002 | Y | A | 10 | 12 | A.P. Calculus (BC) (10-12) |
| 07040000010 | Y | A | 09 | 12 | Calculus (10-12) |
| 07040000020 | Y | A | 09 | 12 | Pre-calculus (10-12) |
| 07040000030 | N | A | 10 | 12 | Calculus Elective (10-12) |
| 07040013001 | N | A | 10 | 12 | A.P. Calculus Elective Conc. Enroll |
| 07040013010 | N | A | 09 | 12 | Calculus Elective Conc. Enroll |
| 07040013020 | N | A | 09 | 12 | Pre-calculus Elective Conc. Enroll |
| 07060000000 | Y | A | | | Statistics |
| 07060000001 | Y | A | 10 | 12 | A.P. Statistics (10-12) |
| 07060000010 | Y | A | 10 | 12 | Statistics (10-12) |
| 07060013010 | N | A | 10 | 12 | Statistics Elective Conc. Enroll |
| 07070000010 | N | A | 07 | 12 | Mathematics Electives |
| 07070000011 | Y | I | 10 | 12 | Intuitive Calculus |
| 07070000020 | Y | I | 10 | 12 | Mathematics of Personal Finance |
| 07070000060 | Y | I | 11 | 12 | Mathematics Prep- ACT/SAT |
| 07070000070 | Y | I | 12 | 12 | Senior Mathematics Review for College |
| 07070000080 | Y | I | 10 | 12 | Quantitative Analysis |
| 07070000090 | Y | I | 10 | 12 | Discrete Mathematics |
| 07070000100 | Y | I | 10 | 12 | Applied Mathematics III |
| 07070000903 | Y | I | | | Math Level 3 |
| 07070000904 | Y | I | | | Math Level 4 |
| 07070013010 | N | A | 09 | 12 | Mathematics Electives Conc. Enroll |

**Attendance Value Table**

| Year 1 | Year 2<br>Absent 15 days or more | Year 2<br>Absent fewer than 15 days |
|---|---|---|
| Absent 15 days or more | 0 | 300 |
| Absent fewer than 15 days | 0 | 200 |

**High School Value Table**

| 2006 (Year 1) Level | 2007 (Year 2) Level | | | | | |
|---|---|---|---|---|---|---|
| | 1a | 1b | 2a | 2b | 3 | 4 |
| 1a | 0 | 200 | 250 | 300 | 350 | 375 |
| 1b | 0 | 125 | 200 | 300 | 350 | 350 |
| 2a | 0 | 50 | 150 | 175 | 325 | 325 |
| 2b | 0 | 0 | 75 | 175 | 300 | 325 |
| 3 | 0 | 0 | 0 | 100 | 200 | 300 |
| 4 | 0 | 0 | 0 | 0 | 125 | 225 |